ABSTRACT

A Base Station Controller (BSC) that reduces the occurrence of audible noise in a Code Division Multiple Access (CDMA) radio network is provided. The BSC according to one embodiment of the present invention comprises a Media Stream Board (MSB) for compressing groups of 160 PCM speech samples from a Public Switch Telephone Network (PSTN) into vocoded frames, and a Special Purpose Board (SPB) for reformatting the vocoded frames from the MSB into over-the-air CDMA vocoded frames. The MSB and SPB each have a local timer that is slave to "PSTN time". The BSC further comprises a Timing Unit Board (TUB) connected to a GPS receiver. The TUB receives "GPS time" from the GPS receiver. The TUB generates timing cells, each containing time-of-day information according to "GPS time". The TUB distributes the timing cells to the MSB and the SPB over an Asynchronous Transfer Mode (ATM) network. The MSB and SPB use the received timing cells to compare their local timer, which tracks "PSTN time", to "GPS time". The MSB and the SPB realign their local timer with "GPS time" whenever their local timer drifts from "GPS time" outside of a predetermined time window.